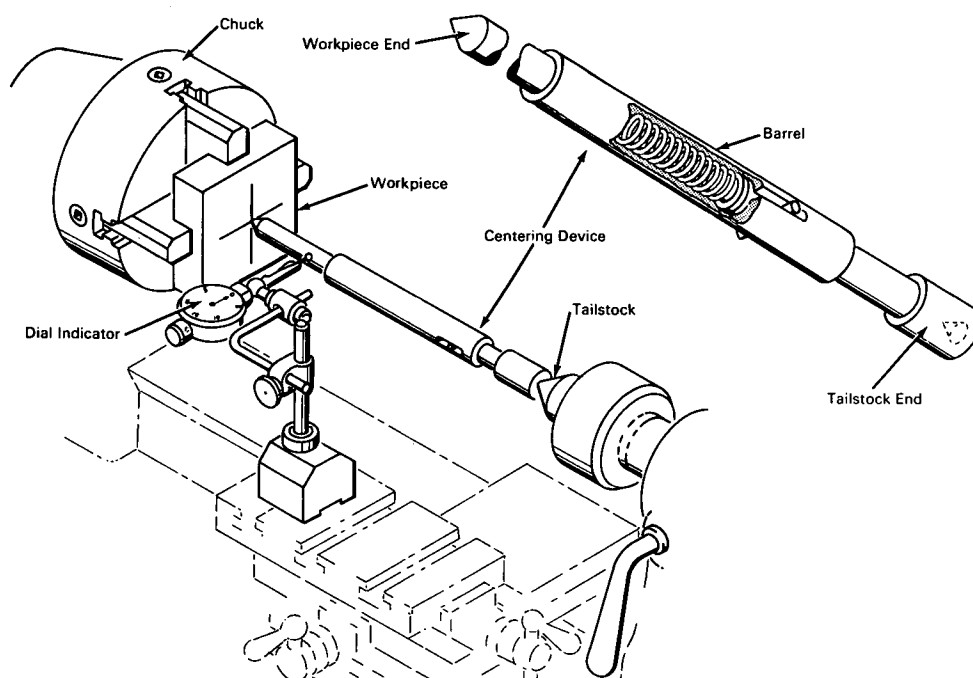


NASA TECH BRIEF



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Device Facilitates Centering of Workpieces in Lathe Chuck



The problem:

To provide a device that will facilitate centering a workpiece in an independent (four-jaw) lathe chuck. Present methods of centering a workpiece in such a chuck, which involve either visual sighting of the intersection of layout lines on the workpiece to a tailstock center or the use of a wiggler are time consuming and unreliable.

The solution:

A spring-loaded device used in conjunction with a standard dial indicator.

How it's done:

In using the device to center a workpiece in an independent chuck, the pointed end of the device is set on the punched center of the layout lines on the workpiece and the drilled end is positioned to engage with the lathe tailstock center. The device is held in place by advancing the tailstock until the spring is partially compressed. The ball end of the feeler arm of a dial indicator mounted on the cross-feed tool turret is then brought to touch the periphery of the centering device near its pointed end. The

(continued overleaf)

chuck is rotated by hand and the four jaws are sequentially adjusted until the desired readout is obtained on the dial indicator, denoting that the center of the workpiece is aligned with the center of the chuck. The centering device is released after use by grasping the barrel and exerting an axial push toward the tailstock.

Note:

Inquiries concerning this innovation may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama, 35812
Reference: B66-10277

Patent status:

No patent action is contemplated by NASA.

Source: Lee Prater
of North American Aviation, Inc.
under contract to
Marshall Space Flight Center
(M-FS-685)